

1 (twice amended). A surgical targeting system for adding an indicia image to a radiographic image of a body resulting from passage of image radiation through the body, said targeting system comprising:

5 an antimicrobial drape having an inner surface of sufficient flexibility to conform to at least a portion of an outer surface of the body, said drape being puncturable to provide access to the outer surface of the body, said drape being transparent to the imaging radiation;

10 an indicia affixed to a portion of said drape, said indicia comprising coordinates which are rectilinear and orthogonal, said indicia being opaque to the imaging radiation resulting in the indicia image corresponding to said indicia; and

15 a means for fixing said drape to the outer surface of the body such that said indicia provides a reference on the body for correlating portions of the body to the radiographic body image [, said drape being sufficiently pliable so that, when said drape is fixed to the outer surface of the body, said drape is puncturable to form an opening therein through which surgery can be performed on the body, said pliability of said drape being sufficient to provide for increasing the size of said opening in said drape during the surgery].

11 (twice amended). A system for providing a sterile field around an elongate body comprising [:]

5 an antimicrobial drape having a cylindrical portion and an end portion connected to and closing one end of said cylindrical portion, said end portion being hemispherical, said drape having sufficient flexibility to conform to at least a portion of an outer surface of the elongate body, said drape being puncturable to provide access to the outer surface of the body [; and

10 means for fixing said drape to the outer surface of the body] , said drape being formed of expandable material and sized to have an internal volume which is less than the volume of the elongate body enabling said drape to be shrink-fitted onto the body, said drape [and fixing means] being sterile to provide a sterile field around the outer

surface of the body accessed by puncturing of said drape [, said drape being sufficiently pliable so that, when said drape is fixed to the outer surface of the body, said drape is puncturable to form an opening therein through which surgery can be performed on the
15 body, said pliability of said drape being sufficient to provide for increasing the size of said opening in said drape during the surgery].

15 (amended). The sterile field system of claim 11 wherein said drape is transparent to imaging radiation,

said sterile field system further comprising an indicia affixed to a portion of said drape, said indicia being opaque to the imaging radiation such that a radiographic image
5 of the body resulting from passage of the image radiation through the body includes an indicia image corresponding to said indicia,

said [fixing means] shrink-fitting of said drape onto the body fixing said indicia relative to the outer surface such that said indicia provides a reference on said body for correlating portions of the body to the radiographic image thereof.

16 (twice amended). A system for providing a sterile field around a conical body comprising:

a conical antimicrobial drape having sufficient flexibility to conform to at least a portion of an outer surface of the [elongate] conical body, said drape having a
5 longitudinally extending radial cutout comprising a base which coincides with a peripheral edge of said drape, said drape being puncturable to provide access to the outer surface of the body; and

means for fixing said drape to the outer surface of the body, said drape and fixing means being sterile to provide a sterile field around the outer surface of the body
10 accessed by puncturing of said drape [, said drape being sufficiently pliable so that, when said drape is fixed to the outer surface of the body, said drape is puncturable to form an opening therein through which surgery can be performed on the body, said pliability of

said drape being sufficient to provide for increasing the size of said opening in said drape during the surgery].

22 (twice amended). A method for correlating a selected portion [of] within a body to a radiographic image of the body for treatment of the body, said method comprising the steps of:

applying a radio-transparent drape having radio-opaque indicia to the body;

5 fixing said drape and indicia to the body;

a first directing of imaging radiation through said drape and indicia such that a first radiographic image of said body and indicia is formed on a medium, the portion of the drape having the indicia which cause the formation of the indicia image defining an indicia region of the drape;

10 a first referencing on the radiographic image of the selected portion [of] within the body relative to the indicia;

a first locating of the selected portion [of] within the body by referencing the body relative to the indicia on the drape in a manner corresponding to said first referencing of the radiographic image;

15 [puncturing the drape to form an opening therein;

surgically operating on the body through the opening in the drape; and
increasing the size of the opening in the drape during said surgically operating step]

providing sufficiently unobstructed access to the indicia region of the drape to enable positioning by the hand of the operator adjacent to the indicia region of the drape;

20 making a surgical incision through the indicia region of the drape and into the body sufficient to access the selected portion;

a second directing of imaging radiation through said drape and indicia such that a radiographic image of said body and indicia is formed on the medium;

25 a second referencing on the radiographic image of the selected portion within the body relative to the indicia; and

a second locating of the selected portion within the body by referencing the body relative to the indicia on the drape in a manner corresponding to said second referencing of the radiographic image.

23 (amended). The method of claim 22 [and further comprising the steps of:
referencing a second selected portion of the body on the radiographic image
relative to the indicia on the radiographic image; and

5 locating the second selected portion of the body by referencing the body relative
to the indicia on the drape in a manner corresponding to said referencing of the second
selected portion of the radiographic image]

wherein the step of making a surgical incision through the indicia region of the
drape comprises placing of the hand of the operator in direct contact with the indicia
region.

24 (amended). The method of claim 22 wherein said applying step comprises
placing the drape on the body such that the body is disposed between at least two
opposing portions of the indicia region of the drape, said placing of the drape further
providing that each said portion of the indicia region of the drape is contained in a
5 separate plane which is in parallel separation to the other plane.

25 (amended). The method of claim 24 [22]

[wherein said applying step comprises placing the drape on the body such that the
body is disposed between at least two portions of the indicia,]

5 wherein said first or second referencing [step comprises] steps comprise
identifying on the radiographic image the portions of the indicia intersected by an axis
coinciding with a selected direction through the body, said axis being defined by
intersections thereof with a specific indicia in each of said separate planes,

[wherein] said first or second locating [step comprises] steps comprising locating
the selected direction through the body by referencing the body relative to the portions of

10 the indicia on the drape identified in said corresponding referencing of the radiographic image [;

wherein said puncturing step comprises puncturing the drape to access the body adjacent to at least one of the portions of the indicia] .

26 (twice amended). A method for correlating a selected portion [of] within a body to a radiographic image of the body for treatment of the body, said method comprising the steps of:

applying a radio-transparent drape having radio-opaque indicia to the body;

5 fixing said drape and indicia to the body;

a first directing of imaging radiation through said drape and indicia such that a first radiographic image of said body and indicia is formed on a medium, the portion of the drape having the indicia which cause the formation of the indicia image defining an indicia region of the drape;

10 a first referencing on the radiographic image of the selected portion [of] within the body relative to the indicia;

[puncturing the drape to form an opening therein;

surgically operating on the body through the opening in the drape;

increasing the size of the opening in the drape during said surgically operating step; and]

15 a first locating of the selected portion [of] within the body by referencing the body relative to the indicia on the drape in a manner corresponding to said first referencing of the radiographic image;

providing sufficiently unobstructed access to the indicia region of the drape to enable positioning by the hand of the operator adjacent to the indicia region of the drape;

20 making a surgical incision through the indicia region of the drape and into the body sufficient to access the selected portion within the body;

inserting an implant through the surgical incision and into the body to the selected portion within the body;

25 a second directing of imaging radiation through said drape and indicia such that a
 radiographic image of the body, indicia and implant is formed on the medium;
 a second referencing on the radiographic image of the implant and selected
 portion within the body relative to the indicia; and
 a second locating of the implant relative to the selected portion within the body by
 referencing the implant and body relative to the indicia on the drape in a manner
30 corresponding to said second referencing of the radiographic image.

27 (twice amended). A method for correlating a selected portion [of] within and a
selected direction through a body to a radiographic image of the body for treatment of the
body, said method comprising the steps of:

5 applying a radio-transparent drape having radio-opaque indicia to the body [such
that portions of the drape define at least two surfaces inclined relative to one another] ;

 fixing said drape and indicia to the body;

 directing imaging radiation through said drape such that a radiographic image of
said body and indicia is formed on a medium;

10 referencing on the radiographic image the selected portion [of] within the body
relative to the indicia, said referencing step further comprising referencing a selected
direction relative to the body and which intersects the selected portion, said referencing
step comprising identifying a reference indicia defined by the indicia which is intersected
by the selected direction;

15 [identifying on the radiographic image respective indicia on the inclined two
surfaces, said respective indicia being intersected by an axis coinciding with a selected
direction through the body, said referencing step further comprising identifying on the
radiographic image indicia on one of the inclined two surfaces coinciding with the depth
of the selected direction relative to the other of the inclined two surfaces;

 puncturing the drape to form an opening therein;

20 surgically operating on the body through the opening in the drape;